UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,928	08/18/2003	Ray Y. Lai	5681-66300	3868
58467 7590 08/19/2008 MHKKG/SUN P.O. BOX 398 AUSTIN, TX 78767		3	EXAMINER	
			SHAW, PELING ANDY	
AUSTIN, IA /	5/0/		ART UNIT	PAPER NUMBER
			2144	
			MAIL DATE	DELIVERY MODE
			08/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/642,928	LAI, RAY Y.				
Office Action Summary	Examiner	Art Unit				
	PELING A. SHAW	2144				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>05 Ma</u>	av 2008					
<u></u>	action is non-final.					
3) Since this application is in condition for allowan		secution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-80</u> is/are pending in the application.						
4a) Of the above claim(s) <u>1-17 and 56-80</u> is/are	withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.	· · · · · · · · · · · · · · · · · · ·					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement					
	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>05 May 2008</u> is/are∶ a)[	$oxtimes$ accepted or b) $igsqcup$ objected to $oldsymbol{t}$	by the Examiner.				
Applicant may not request that any objection to the o	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcti	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	_					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:					

Art Unit: 2144

### **DETAILED ACTION**

1. Amendment received on 05/05/2008 has been entered into record. Claims 38-55 are amended. Claims 1-17 and 56-80 are withdrawn. Claims 1-80 are currently pending.

### **Priority**

2. This application has no priority claim made. The filing date is 08/18/2003.

### **Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-28, 33, 35, 37-46, 51, 53 and 55 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 8-10 and 13-17 of copending Application No. 10/692,913.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the independent copending claims and the independent presented claims differ only with respect to the specification of more detail computer-implemented steps of subnet address space and mask request, allocation and management per subnet address space manager and subnet address manger. Thus, the set of presented claims comprise a majority of subject

Art Unit: 2144

matter which is expressly disclosed and claimed by copending Application No. 10/692,913, and further, since the differences between the copending claims and the presented claims would have been an obvious variation of the copending application, minimally based on the contained teachings, "subnet address space request", "subnet address space allocation", "subnet address space management" and potentially other rationale (see, inter alia, MPEP §2144.04).

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Jim Conallen (Building Web Applications with UML: Second Edition, October 10, 2002), hereinafter referred as Jim.

a. Regarding claim 18, Jim disclosed a system for generating a vendor-independent Web Service architecture (page 65: using UDDI, a standard for publishing and describing Web services) comprising a plurality of heterogeneous components (page 425: web server a most likely a commodity component, such as Tomcat, WebSphere, Web Logic and IIS), comprising: means for generating one or more Use Cases for the Web Service in accordance with one or more design patterns (Fig. 6-11 on page 115:

Application/Control Number: 10/642,928

Page 4

Art Unit: 2144

develop use case model; page 173: use case to describe system behavior; Fig. 8-5 on page 178: browse catalog use case; page 120: design workflow; pages 179-183: modeling in UML); means for generating a high-level architecture for the Web Service (Fig. 8-4 on page 176: top-level use case diagram) and in accordance with the one or more design patterns (Fig. 8-7 on page 181: browse catalog flow sequence), wherein the high-level architecture identifies two or more entities of the Web Service (Fig. D-3 on page 425: main analysis of class diagram in screen components; page 438: entity tier and data tier) and the relationships and interactions among the entities (page 177: relationship between use cases); and means for generating a logical architecture for the Web Service according to the use case scenarios and in accordance with the one or more design patterns (page 237: logical view of UML, server page and client page), wherein the logical architecture identifies two or more logical components of the Web Service (Fig. 11-4 on page 241: multiple forms in client pages) and the relationship among the logical components (Fig. 11-3 on page 239: relationship among WAE elements; Fig. 11-5 on page 241: simple client page link association; Fig. 11-6: link associations originating from client page), and wherein the logical architecture comprises two or more layers (Table 11-1 on page 239: HTTP, HTML; pages 240 and 242: component view e.g. JSP. ASPX, ASCX, XML).

b. Regarding claim 19, Jim disclosed the system as recited in claim 18, wherein the Web Service architecture incorporates Quality of Services including reliability, scalability, and availability on the Web Service system (pages 99 and 127; quality assurance,

Application/Control Number: 10/642,928

Art Unit: 2144

human critical Web application, testing, acceptable defect count; pages 9-10: Web application build and extend a Web system to add business functions).

Page 5

Jim disclosed all limitations of claims 18-19. Claims 18-19 are rejected under 35 U.S.C. 102(e).

- 5. Claims 20-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Jim.
  - a. Regarding claim 20, Jim disclosed a method, comprising: generating a vendorindependent Web Service architecture (page 65: using UDDI, a standard for publishing and describing Web services) comprising a plurality of heterogeneous components (page 425: web server a most likely a commodity component, such as Tomcat, WebSphere, Web Logic and IIS) in accordance with one or more design patterns (Fig. 6-11 on page 115: develop use case model; page 173: use case to describe system behavior), wherein said generating a vendor independent Web Services architecture comprises: generating one or more Use Cases for the Web Service (Fig. 8-5 on page 178: browse catalog use case; page 120: design workflow; pages 179-183: modeling in UML); generating a high-level architecture for the Web Service (Fig. 8-4 on page 176: top-level use case diagram), wherein the high-level architecture identifies two or more entities of the Web Service (Fig. D-3 on page 425: main analysis of class diagram in screen components; page 438: entity tier and data tier) and the relationships and interactions among the entities (page 177: relationship between use cases); generating a logical architecture for the Web Service according to the use case scenarios (page 237: logical view of UML, server page and client page), wherein the logical architecture identifies two or more logical components of the Web

Art Unit: 2144

Service (Fig. 11-4 on page 241: multiple forms in client pages) and the relationship among the logical components (Fig. 11-3 on page 239: relationship among WAE elements; Fig. 11-5 on page 241: simple client page link association; Fig. 11-6: link associations originating from client page), and wherein the logical architecture comprises two or more layers (Table 11-1 on page 239: HTTP, HTML; pages 240 and 242: component view e.g. JSP. ASPX, ASCX, XML); and implementing the Web Service according to the Web Service architecture (pages 9-10 and Fig. 2-1: build Web application based a basic web system on a Web Server).

- b. Regarding claim 21, Jim disclosed the method as recited in claim 20, wherein said generating a high-level architecture for the Web Service comprises identifying one or more Open Standards protocols for use in said interactions among the entities (page 13: implement Web system with HTML over TCP/IP in OSI model for network communication).
- c. Regarding claim 22, Jim disclosed the method as recited in claim 20, wherein the Web Service architecture incorporates Quality of Services including reliability, scalability, and availability on the Web Service (pages 99 and 127: quality assurance, human critical Web application, testing, acceptable defect count; pages 9-10: Web application build and extend a Web system to add business functions).
- d. Regarding claim 23, Jim disclosed the method as recited in claim 20, wherein the entities comprise: a service provider configured to provide one or more services on the Web Service; and one or more service requesters configured to access the one or

Art Unit: 2144

more services from the service provider via a network (pages 22-23: client register, Web site accept, client request Web pages from Web sites).

- e. Regarding claim 24, Jim disclosed the method as recited in claim 23, wherein the entities further comprise a service broker configured to interact with the service provider and service requester to negotiate and provide the services of the service provider to the service requester (pages 22-23: client register, Web site accept, client request Web pages from Web sites).
- f. Regarding claim 25, Jim disclosed the method as recited in claim 23, wherein the entities further comprise a service registry, wherein the service provider is further configured to register and publish the services in the service registry, and wherein the service requester is further configured to discover the service provider through the service registry (pages 65-67, Fig. 4-6: UDDI registry for publish, describing and register Web service).
- g. Regarding claim 26, Jim disclosed the method as recited in claim 23, wherein the Web Service is a Business-to-Consumer Web Service, wherein the service provider is a business service provider, and wherein the service requester is an end user (pages 22-23: client register, Web site accept, client request Web pages from Web sites).
- h. Regarding claim 27, Jim disclosed the method as recited in claim 23, wherein the Web Service is a Business-to-Business Web Service, wherein the service provider is a business service provider, and wherein the service requester is a server (pages 22-23: application server vs. Web server).

Application/Control Number: 10/642,928

Page 8

Art Unit: 2144

i. Regarding claim 28, Jim disclosed the method as recited in claim 23, wherein the layers of the logical architecture comprise two or more of: a network layer configured to serve as an underlying network for services (pages 84-85: MIME; page 13: TCP/IP); a transport layer for delivering messages between components of the Web Service (pages 10 and 13: HTTP); a service description language layer configured to describe service type and functionality of the services of the service provider (pages 66-67: WDSL); a transaction routing layer configured to route messages on the transport layer (page 13: TCP); a service discovery layer configured to search for and locate services (pages 10 and 13: HTTP); a service negotiation layer configured to negotiate exchanges between the service requesters and the service provider (pages 22-23: client register, Web site accept, client request Web pages from Web sites); a management layer configured for provisioning of the services and for monitoring and administration of the services (page 221: analysis team identifies objects and classes of objects that can collaborate to perform the required behavior of system; pages 65-67, Fig. 4-6: using UDDI for publishing, describing discovery and integrate services); a Quality of Service layer configured to provide reliability, scalability, and availability on the Web Service (pages 99 and 127: quality assurance, human critical Web application, testing, acceptable defect count; pages 9-10: Web application build and extend a Web system to add business functions); a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer (page 87: SET and SSL for security protection); and an Open Standards layer

Application/Control Number: 10/642,928

Art Unit: 2144

(page 13: implement Web system with HTML over TCP/IP in OSI model for network communication).

Page 9

- Regarding claim 29, Jim disclosed the method as recited in claim 28, wherein the
   Open Standards layer is XML (page 64: SOAP built on top of XML).
- k. Regarding claim 30, Jim disclosed the method as recited in claim 28, wherein the network layer is the public Internet over TCP/IP (page 13, TCP over IP).
- 1. Regarding claim 31, Jim disclosed the method as recited in claim 28, wherein the transport layer is one of HTTP, SMTP, and SOAP over HTTP (page 13: implement Web system with HTML over TCP/IP in OSI model for network communication).
- m. Regarding claim 32, Jim disclosed the method as recited in claim 20, wherein the design patterns include one or more of: one or more scalability design patterns; one or more reliability design patterns (page 115, Fig. 6-11: performance); one or more manageability design patterns (pages 182-183, Fig. 8-8, 8-9 and 8-10: manage new account); one or more availability design patterns (page 115, Fig. 6-11: availability); and one or more security design patterns (page 115, Fig. 6-11: security and policy, security mechanism).
- n. Regarding claim 33, Jim disclosed the method as recited in claim 20, wherein the design patterns include one or more of: one or more Quality of Services design patterns; one or more Integration design patterns (pages 176 and 178, Fig. 8-4 and 8-5: top level use case for e-retail and browse catalog activity use case); and one or more Security design patterns.

Art Unit: 2144

o. Regarding claim 34, Jim disclosed the method as recited in claim 33, wherein the Quality of Services design patterns include one or more of: a SOAP Cache Design Pattern; a Java Message Service (JMS) Bridge Design Pattern; a Multiple Servlet Engines Design Pattern; an HTTP Load Balancer Design Pattern; a State Management Design Pattern (page 23: client state management; page 412, Fig. 2, basic flow scenario); a SOAP Logger Design Pattern; a High Availability of Service Registry Design Pattern; a UDDI Deployment Design Pattern; a Publish, Unpublish, and Discover Web Services Design Pattern; a Version Management of Deployment and Service Registry Design Pattern; and a Registry Content Management Design Pattern.

- p. Regarding claim 35, Jim disclosed the method as recited in claim 33, wherein the Integration design patterns include one or more of: an Application-to-Application Design Pattern (page 176-178: user case for e-retail includes check order status, browse catalog, check out, process payment and ship order); a Standard Build Design Pattern; a Hub-Spoke Replication Design Pattern; a Federated Replication Design Pattern; a Multi-Step Application Integration Design Pattern (pages 176 and 178, Fig. 8-4 and 8-5: top level use case for e-retail and browse catalog activity use case); a Data Exchange Design Pattern; a Closed Process Integration Design Pattern; an Open Process Integration Design Pattern; a Service Consolidation-Broker Integration design pattern; and a Reverse Auction-Broker Integration design pattern.
- q. Regarding claim 36, Jim disclosed the method as recited in claim 33, wherein the Security design patterns include one or more of: a Single Sign-on Design Pattern

Art Unit: 2144

(pages 182-183, Fig. 8-8 and 8-9: sign use case); and a Messaging Transport Design Pattern (page 413, Fig. C-3: new controller scenario.

r. Regarding claim 37, Jim disclosed the method as recited in claim 20, wherein the logical architecture further comprises a plurality of tiers, wherein the tiers comprise two or more of: a client tier (page 431); a presentation tier (page 435); a business tier (page 115: business requirement); an integration tier (page 122, Fig. 6-15); and a resource tier (pages 115 and 438-439).

Jim disclosed all limitations of claims 20-37. Claims 20-37 are rejected under 35 U.S.C. 102(e).

- 6. Claims 38-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Jim.
  - a. Regarding claim 38, Jim disclosed a computer-accessible storage medium storing program instructions (pages 9-10 and Fig. 2-1: basic web system consists of Web application built on Web system on a Web Server), wherein the program instructions are computer-executable to implement: generating a vendor-independent Web Service architecture (page 65: using UDDI, a standard for publishing and describing Web services) comprising a plurality of heterogeneous components (page 425: web server a most likely a commodity component, such as Tomcat, WebSphere, Web Logic and IIS) in accordance with one or more design patterns (Fig. 6-11 on page 115: develop use case model; page 173: use case to describe system behavior), wherein said generating a vendor-independent Web Services architecture comprises: generating one or more Use Cases for the Web Service (Fig. 8-5 on page 178: browse catalog use case; page 120: design workflow; pages 179-183: modeling in UML ); generating

Art Unit: 2144

a high-level architecture for the Web Service (Fig. 8-4 on page 176: top-level use case diagram), wherein the high-level architecture identifies two or more entities of the Web Service (Fig. D-3 on page 425: main analysis of class diagram in screen components; page 438: entity tier and data tier) and the relationships and interactions among the entities (page 177: relationship between use cases); generating a logical architecture for the Web Service according to the use case scenarios (page 237: logical view of UML, server page and client page), wherein the logical architecture identifies two or more logical components of the Web Service (Fig. 11-4 on page 241: multiple forms in client pages) and the relationship among the logical components (Fig. 11-3 on page 239: relationship among WAE elements; Fig. 11-5 on page 241: simple client page link association; Fig. 11-6: link associations originating from client page), and wherein the logical architecture comprises two or more layers (Table 11-1 on page 239: HTTP, HTML; pages 240 and 242: component view e.g. JSP. ASPX, ASCX, XML); and implementing the Web Service according to the Web Service architecture (pages 9-10 and Fig. 2-1: build Web application based a basic web system on a Web Server).

b. Regarding claim 39, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein, in said generating a high-level architecture for the Web Service, the program instructions are further computer-executable to implement identifying one or more Open Standards protocols for use in said interactions among the entities (page 13: implement Web system with HTML over TCP/IP in OSI model for network communication).

Art Unit: 2144

c. Regarding claim 40, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein the Web Service architecture incorporates Quality of Services including reliability, scalability, and availability on the Web Service (pages 99 and 127: quality assurance, human critical Web application, testing, acceptable defect count; pages 9-10: Web application build and extend a Web system to add business functions).

- d. Regarding claim 41, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein the entities comprise: a service provider configured to provide one or more services on the Web Service; and one or more service requesters configured to access the one or more services from the service provider via a network (pages 22-23: client register, Web site accept, client request Web pages from Web sites).
- e. Regarding claim 42, Jim disclosed the computer-accessible storage medium as recited in claim 41, wherein the entities further comprise a service broker configured to interact with the service provider and service requester to negotiate and provide the services of the service provider to the service requester (pages 22-23: client register, Web site accept, client request Web pages from Web sites).
- f. Regarding claim 43, Jim disclosed the computer-accessible storage medium as recited in claim 41, wherein the entities further comprise a service registry, wherein the service provider is further configured to register and publish the services in the service registry, and wherein the service requester is further configured to discover

Art Unit: 2144

the service provider through the service registry (pages 65-67, Fig. 4-6: UDDI registry for publish, describing and register Web service).

- g. Regarding claim 44, Jim disclosed the computer-accessible storage medium as recited in claim 41, wherein the Web Service is a Business-to-Consumer Web Service, wherein the service provider is a business service provider, and wherein the service requester is an end user (pages 22-23: client register, Web site accept, client request Web pages from Web sites).
- h. Regarding claim 45, Jim disclosed the computer-accessible storage medium as recited in claim 41, wherein the Web Service is a Business-to-Business Web Service, wherein the service provider is a business service provider, and wherein the service requester is a server (pages 22-23: application server vs. Web server).
- i. Regarding claim 46, Jim disclosed the computer-accessible storage medium as recited in claim 41, wherein the layers of the logical architecture comprise two or more of: a network layer configured to serve as an underlying network for services (pages 84-85: MIME; page 13: TCP/IP); a transport layer for delivering messages between components of the Web Service (pages 10 and 13: HTTP); a service description language layer configured to describe service type and functionality of the services of the service provider (pages 66-67: WDSL); a transaction routing layer configured to route messages on the transport layer (page 13: TCP); a service discovery layer configured to search for and locate services (pages 10 and 13: HTTP); a service negotiation layer configured to negotiate exchanges between the service requesters and the service provider (pages 22-23: client register, Web site accept, client request

Art Unit: 2144

Web pages from Web sites); a management layer configured for provisioning of the services and for monitoring and administration of the services (page 221: analysis team identifies objects and classes of objects that can collaborate to perform the required behavior of system; pages 65-67, Fig. 4-6: using UDDI for publishing, describing discovery and integrate services); a Quality of Service layer configured to provide reliability, scalability, and availability on the Web Service (pages 99 and 127: quality assurance, human critical Web application, testing, acceptable defect count; pages 9-10: Web application build and extend a Web system to add business functions); a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer (page 87: SET and SSL for security protection); and an Open Standards layer (page 13: implement Web system with HTML over TCP/IP in OSI model for network communication).

- j. Regarding claim 47, Jim disclosed the computer-accessible storage medium as recited in claim 46, wherein the Open Standards layer is XML (page 64: SOAP built on top of XML).
- k. Regarding claim 48, Jim disclosed the computer-accessible storage medium as recited in claim 46, wherein the network layer is the public Internet over TCP/IP (page 13, TCP over IP).
- Regarding claim 49, Jim disclosed the computer-accessible storage medium as recited
  in claim 46, wherein the transport layer is one of HTTP, SMTP, and SOAP over
  HTTP (page 13: implement Web system with HTML over TCP/IP in OSI model for
  network communication).

Art Unit: 2144

m. Regarding claim 50, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein the design patterns include one or more of: one or more scalability design patterns; one or more reliability design patterns (page 115, Fig. 6-11: performance); one or more manageability design patterns (pages 182-183, Fig. 8-8, 8-9 and 8-10: manage new account); one or more availability design patterns (page 115, Fig. 6-11: availability); and one or more security design patterns (page 115, Fig. 6-11: security and policy, security mechanism).

- n. Regarding claim 51, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein the design patterns include one or more of: one or more Quality of Services design patterns; one or more Integration design patterns (pages 176 and 178, Fig. 8-4 and 8-5: top level use case for e-retail and browse catalog activity use case); and one or more Security design patterns.
- o. Regarding claim 52, Jim disclosed the computer-accessible storage medium as recited in claim 51, wherein the Quality of Services design patterns include one or more of: a SOAP Cache Design Pattern; a Java Message Service (JMS) Bridge Design Pattern; a Multiple Servlet Engines Design Pattern; an HTTP Load Balancer Design Pattern; a State Management Design Pattern (page 23: client state management; page 412, Fig. 2, basic flow scenario); a SOAP Logger Design Pattern; a High Availability of Service Registry Design Pattern; a UDDI Deployment Design Pattern; a Publish, Unpublish, and Discover Web Services Design Pattern; a Version Management of Deployment and Service Registry Design Pattern; and a Registry Content Management Design Pattern.

Art Unit: 2144

p. Regarding claim 53, Jim disclosed the computer-accessible storage medium as recited in claim 51, wherein the Integration design patterns include one or more of: an Application-to-Application Design Pattern (page 176-178: user case for e-retail includes check order status, browse catalog, check out, process payment and ship order); a Standard Build Design Pattern; a Hub-Spoke Replication Design Pattern; a Federated Replication Design Pattern; a Multi-Step Application Integration Design Pattern (pages 176 and 178, Fig. 8-4 and 8-5: top level use case for e-retail and browse catalog activity use case); a Data Exchange Design Pattern; a Closed Process Integration Design Pattern; an Open Process Integration Design Pattern; a Service Consolidation-Broker Integration design pattern; and a Reverse Auction-Broker Integration design pattern.

- q. Regarding claim 54, Jim disclosed the computer-accessible storage medium as recited in claim 51, wherein the Security design patterns include one or more of: a Single Sign-on Design Pattern (pages 182-183, Fig. 8-8 and 8-9: sign use case); and a Messaging Transport Design Pattern (page 413, Fig. C-3: new controller scenario).
- r. Regarding claim 55, Jim disclosed the computer-accessible storage medium as recited in claim 38, wherein the logical architecture further comprises a plurality of tiers, wherein the tiers comprise two or more of: a client tier (page 431); a presentation tier (page 435); a business tier (page 115: business requirement); an integration tier (page 122, Fig. 6-15); and a resource tier (pages 115 and 438-439).

Jim disclosed all limitations of claims 38-55. Claims 38-55 are rejected under 35 U.S.C. 102(e).

Art Unit: 2144

# Response to Arguments

7. Applicant's arguments filed on 05/05/2008 have been fully considered, but they are not persuasive.

- a. Applicant argues that Jim is generally not directed at Web Services, but is instead generally directed at Web applications as per 1<sup>st</sup> paragraph on page 25 through 1<sup>st</sup> paragraph 27. Examiner could not tell the difference of a Web Service vs. an Web application as particularly related applicant's claimed invention of Web Service architecture per claim 1 language vs. in general Jim's description in defining architecture (chapter 7), requirements and user cases (chapter 8) and development of web applications (chapter 6). Jim does not seem to stop short in just building a web application but intended for a service, i.e. Web service, as per pages 63-68 of Jim.
- b. As examiner has further reviewed applicant's other arguments, it seems that applicant's whole arguments are on Jim is not on Web services but on Web application. As discussed per item a above and as examiner further reviewed Jim in general, it seems that Web application as per Jim is in respect with services built on Web and related technology, see Preface of Jim. The claimed invention as presented seems to be read upon with Jim in general and specific per recited references from Jim, see claim rejections as above. Thus applicant's arguments are not persuasive.
- c. Applicant needs to point other particular functions or elements of functions that are not disclosed or suggested by Jim as per current or future amended claim set to further prosecution.

Art Unit: 2144

#### Remarks

8. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

- a. DeBettencourt et al. (US 6279001 B1) Web service
- b. Anagol-Subbarao et al. (US 20040221001 A1) Web service architecture and methods
- Berkland et al. (US 20040111525 A1) Dynamic web service implementation discovery and selection apparatus and method
- d. Alsafadi et al. (US 20030236824 A1) Scalable architecture for web services
- Koeppel (US 20050015491 A1) Systems, methods, and articles of manufacture for dynamically providing web services
- f. Kunisetty (US 20040221008 A1) System and method for caching type information for un-typed web service requests
- g. Martinez et al. (US 20030097464 A1) Distributed web services network architecture
- h. Zhang et al. (US 7114146 B2) System and method of dynamic service composition for business process outsourcing

Art Unit: 2144

### Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the statu9s of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2144

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/P. A. S./ Examiner, Art Unit 2144

/William C. Vaughn, Jr./ Supervisory Patent Examiner, Art Unit 2144 Application Number

Application/Control No.	Applicant(s)/Patent under Reexamination		
10/642,928	LAI, RAY Y.		
Examiner	Art Unit		
PELING A SHAW	2144		